

Appl. No. 10/085,809
Atty. Docket No.: 1998B014E
Amdt. dated June 14, 2006
Reply to Office Action of April 14, 2006

REMARKS/ARGUMENTS

This reply is in response to the Final Office Action dated April 14, 2006. Claims 1-28 are pending in the application and claims 7-25 stand rejected. Claims 1-6 and 26-28 have been withdrawn from consideration.

Applicant has cancelled restricted claims 1-6 and 26-28 without prejudice, preserving the right to pursue those restricted claims in a separate divisional application. Applicant has also cancelled those claims and amended the remaining claims as shown herein to reduce issues for appeal. Such amendments to the claims are intended to correct matters of form and/or to correct grammatical/typographical errors. Those proposed amendments are not intended to narrow the claims or otherwise limit the scope of equivalents thereof. Entry of the foregoing amendment and reconsideration of the claims is respectfully requested.

Claims 7-25 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over McElvain et al. (WO 01/05842A1) hereafter "McElvain" and Palmroos (WO 96/18662) hereafter "Palmroos." The Examiner admits that McElvin does not disclose reconfiguring its apparatus into two connected closed loop reactors. Yet, the Examiner asserts that Palmroos discloses "that connected multiple connected [sic] loop reactors each with its own inlet and outlet, allow for optimization of reaction stages." The Examiner then concludes, "It is well within the skill of one of ordinary skill in the art to be able to connect and disconnect the various elements of the known loop reactor of McElvain to form multiple connected loop reactors of Palmroos, and one would be motivated to do so in order to gain further control of various reaction stages and optimization of reaction stages."

Applicants traverse the rejection on grounds that the Examiner has not established a *prima facie* case of obviousness. To establish *prima facie* obviousness of a claimed invention, all claim limitations must be taught or suggested by the prior art. See In re Royka, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). Further, the teaching or suggestion to make the claimed invention and the reasonable expectation of success must both be found in the prior art, not in the Applicants' disclosure. See M.P.E.P. § 2143, citing In re Vaeck, 947 F.2d 488 (Fed. Cir. 1991). Still further, the Examiner must *particularly* identify any suggestion, teaching or motivation from *within* the references to combine the references (emphasis added). See In Re Dembiczak, 50 USPQ2d 1614 (Fed. Cir. 1999). The mere recitation of a combination of references does not

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amount to particularly identifying a suggestion, teaching, or a motivation to combine the references.

Here, the Examiner has not provided any motivation from within the references themselves to arrive at the claimed invention. For at least this reason, withdrawal of the rejection and allowance of the claims is respectfully requested.

Instead, the Examiner is relying on the "knowledge of one of ordinary skill in the art" to provide the motivation to modify the cited references and arrive at the claimed invention. Such assertion is based on an unfounded legal conclusion and/or hindsight reconstruction. Neither of which may not provide the basis for rejection under § 103. Further, the Examiner is kindly reminded that the mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art suggests the desirability of the combination. In re Mills, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990). For at least these reasons, withdrawal of the rejection and allowance of the claims is respectfully requested.

Applicants acknowledge that the teaching or suggestion may be expressly or impliedly reasoned from knowledge generally available to one of ordinary skill in the art. See In re Jones, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). However, the level of skill in the art cannot be relied upon to provide the suggestion to combine references. See M.P.E.P. § 2143.01, citing Al-Site Corp. v. VSI Int'l Inc., 174 F.3d 1308 (Fed. Cir. 1999). The Examiner is further reminded that simply because a claimed device or process uses a known scientific principle does not, of itself, make that device or process obvious. In re Brouwer, 77 F.3d 422, 37 USPQ2d 1663 (CAFC 1996).

Furthermore, "rejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness." In re Lee, 277 F.3d 1338, 1343-46 (Fed. Cir. 2002). In other words, the Examiner must "explain the reasons one of ordinary skill in the art would have been motivated to select the references and to combine them to render the claimed invention obvious." See In re Kahn 04-1616 (Fed. Cir. March 22, 2006). If no explanation is provided, then it is inferred that the Examiner used hindsight. See Id.

The Examiner's reliance on In re Bozek is erroneous, and In re Bozek is not good law. The Examiner states that "[o]bviousness may *sometimes* be based on the common knowledge of

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persons skilled in the art without relying on a specific suggestion in a *particular reference*" (emphasis added). First, the Examiner's rejection is based on a combination of references not one "particular reference." Second, "Bozek did not hold that common knowledge and common sense are a substitute for evidence, but only that they may be applied to analysis of the evidence. See, In re Lee. The Federal Circuit further stated:

Bozek did not hold that objective analysis, proper authority, and reasoned findings can be omitted from Board decisions. Nor does Bozek, after thirty-two years of isolation, outweigh the dozens of rulings of the Federal Circuit and the Court of Customs and Patent Appeals that determination of patentability must be based on evidence. This court has remarked, in Smiths Industries Medical Systems, Inc. v. Vital Signs, Inc., 183 F.3d 1347, 1356, 51 USPQ2d 1415, 1421 (Fed. Cir. 1999), that Bozek's reference to common knowledge "does not in and of itself make it so" absent evidence of such knowledge.

Id. Accordingly, the Examiner must identify a particular teaching from the reference itself to arrive at the claimed invention or provide objective evidence that the claimed invention is obvious. The Examiner may not simply allege "common knowledge" or "common sense" in the absence of evidence. See, Id. Therefore, the Examiner's rejection is improper and withdrawal of the rejection is respectfully requested.

Notwithstanding the foregoing discussion, a combination of McElvin and Palmroos does not teach, show, or suggest the claimed invention. McElvin discloses a loop reactor having one feed and one discharge. Palmroos discloses two reactors each having two vertical legs, one feed inlet, and one discharge conduit. Therefore, a combination of those references does not motivate or suggest a loop reactor comprising at least eight vertical legs, at least two feed inlets, and at least two continuous discharge conduits, as required in the claims. For at least this reason, withdrawal of the rejection and allowance of the claims is respectfully requested.

Further, Palmroos teaches connecting the separate reactors by use of an additional conduit (see line 21 in Figure 1 of Palmroos), rather than moving at least two non-vertical runs as recited in Applicants' claims. McElvin makes no mention of moving or reconnecting runs. Therefore, a combination of Palmroos and McElvin does not motivate or suggest "disconnecting at least one connection of each conversion run and reconnecting each conversion run in fluid flow with a

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different vertical leg" as recited in Applicants' claims. For at least this reason, withdrawal of the rejection and allowance of the claims is respectfully requested.

Still further, McElvin shows all discharge conduits on the same leg. Reconfiguring the McElvin multi-loop reactors in the manner suggested by the Examiner would result in some loops having no discharge. Consequently, the proposed modification would render the prior art unsatisfactory for its intended purpose which is a continuous loop process. Such proposed modification is improper under 35 USC 103. In re Gordon, 221 USPQ 1125 (Fed. Cir. 1984). For at least this reason, withdrawal of the rejection and allowance of the claims is respectfully requested.

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CONCLUSION

Having addressed all issues set out in the office action, Applicant respectfully submits that the pending claims are now in condition for allowance. Applicant invites the Examiner to telephone the undersigned attorney if there are any issues outstanding which have not been addressed to the Examiner's satisfaction.

Respectfully submitted,

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Date

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